

ABSTRACT

A system and method are provided for controlling a three-phased motor terminal voltages in relation to both changes in speed and torque of the motor, whereby phase currents are first rotated from a stationary frame to two decoupled current components in a rotor synchronous frame, which enable to derive a voltage along a quadrature axis and a voltage along a direct axis thereof, before rotating back the quadrature and direct axis voltages from the rotor synchronous frame to the stationary frame to yield the motor terminal voltages.